# CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN FRANCISCO BAY REGION

ORDER NO. 85-128

WASTE DISCHARGE REQUIREMENTS FOR:

MONTEREY MUSHROOMS, INC. MORGAN HILL, SANTA CLARA COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region (hereinafter called the Board), finds that:

- 1. Monterey Mushrooms, Inc. (hereinafter called the discharger), by a Report of Waste Discharge (ROWD) dated January 25, 1985, has applied for a permit to operate a Class II surface impoundment at its Morgan Hill facility. This facility is located at the intersection of Santa Teresa Boulevard and Miramonte Avenue, approximately two miles north of Morgan Hill. The facility occupies approximately 70 acres and has been an operating mushroom farm for over 20 years. It was purchased by Monterey Mushrooms from Ralston-Purina in 1982. The surrounding land is zoned agricultural and is used for orchards, flower growing, and pasture.
- 2. Wastewater at the mushroom farm consists of drainage from irrigation of mushroom growing and spawning beds, wash-down water, blowdown from boilers and a cooling tower, and miscellaneous process and clean-up operations. At the time that the Report of Waste Discharge was filed average wastewater flow was 70,000 gallons per day. The applicant believes that reductions in water usage can reduce wastewater flow to 43,000 gallons per day. The wastewater contains suspended solids, oil and grease, dissolved solids, biological and chemical oxygen demands, and nitrogen species, in concentrations which exceed existing ground and surface water quality in the vicinity of the facility. Several of these constituents are present in concentrations which exceed applicable water quality standards or quidelines. This wastewater is currently disposed of to an unlined evaporation/percolation pond.

Bedding from horse stables is composted on site to produce a substrate for mushroom growth and spawning. Spent compost (that is, compost which has been used as a substrate for mushroom growing and spawning) is also stored on site. Both of these operations might also cause water quality related problems.

- The Morgan Hill facility is located at the southwestern edge З. of the southern Santa Clara Valley. The foothills of the Santa Cruz Mountains are along the southwestern edge of the An intermittent stream, known as Fisher Creek, property. flows northwestward through the west half of the facility property. The soil profile beneath the facility consists primarily of discontinuous interbedded sand, silt, and clay alluvial fan deposits of the Quaternary Age. This alluvium is thin at the base of the foothills and about 200 feet thick at the eastern property line. Groundwater beneath the site is at one edge of the Coyote Subbasin of the Santa Clara Valley groundwater basin. The predominant direction of groundwater flow beneath the site is northwest. aguifer beneath this site is unconfined and contains water which is of drinking water quality.
- 4. The beneficial uses of ground and surface waters in the vicinity of this facility are:
  - a. Domestic water supply.
  - b. Agricultural water supply.
  - c. Groundwater Recharge.
  - d. Freshwater Replenishment.
  - e. Non-contact water recreation.
  - f. Wildlife habitat.
- The discharger has proposed to protect these beneficial uses 5. by construction of two evaporation ponds, having a combined evaporative capacity of approximately 53,000 gallons per day, during the 1985-1986 construction season. All raw wastewater containing Total Dissolved Solids in excess of 500 mg/l is to be disposed of in the evaporation ponds, following pre-treatment. Remaining wastewater will be discharged to the existing percolation/evaporation pond. The discharger has also proposed to evaluate the need for a third pond, which would raise combined evaporative capacity to approximately 80,000 gallons per day, prior to the end of 1988, and to install this third pond, if needed, during the construction season following completion of the evaluation. An evaluation of the need for a spent compost storage facility will be conducted at the same time. The discharger believes that a market for spent compost can be developed such that minimal amounts of the material will be stored at the facility at any time.
- 6. The discharger's proposal to construct and operate a Class II surface impoundment, and to discharge wastewater to the existing percolation/evaporation pond, as described in the Report of Waste Discharge filed January 25, 1985 and supplemented by additional submittals of April 4, 1985, May 16, 1985, and August 9, 1985, is in accordance with the requirements of Subchapter 15 of Chapter 3, Title 23, California Administrative Code (hereinafter referred to as Subchapter 15).

- 7. Based on information contained in the submittals cited in Finding 6, the location of the proposed surface impoundment meets the geologic siting standards of Subchapter 15.
- 8. The Regional Board adopted a revised Water Quality Plan for the San Francisco Bay Basin on July 1, 1982 and this Order implements the water quality objectives stated in that plan.
- 9. A negative declaration, pursuant to the California Environmental Quality Act (CEQA), was prepared for the project by the Santa Clara County Planning Department and certified by the Santa Clara County Planning Commission on October 18, 1985.
- 10. The Board notified the discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the discharge and has provided them with an opportunity for a public hearing and to submit their written views and recommendations.
- 11. The Board, in a public hearing held on November 20, 1985, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED that Monterey Mushrooms, Inc., and any other persons or organizations that currently or in the future own this land or operate this facility shall meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder and shall also comply with the following:

#### A. Prohibitions

- 1. The disposal, storage, or handling of wastes shall not create a condition of pollution or nuisance as defined in Section 13050 (1) and (m), respectively, of the California Water Code.
- Wastes shall not be placed in any position where they can be carried from and discharged into waters of the State or of the United States.
- 3. The disposal of hazardous wastes as defined in Section 2521 of Subchapter 15, or designated wastes not produced as a result of this facility's operations, is prohibited.
- 4. The discharge of wastewater containing Total Dissolved Solids in excess of 500 mg/l to any location other than the evaporation ponds described in the ROWD, and supplemental submittals, is prohibited.

- 5. The discharger shall not cause the following conditions to exist in waters of the State at any place outside the waste management units:
  - a. Surface waters
    - Floating, suspended, or deposited macroscopic particulate matter or foam.
    - Bottom deposits or aquatic growths.
    - Alteration of temperature, turbidity, or apparent color beyond present natural background levels.
    - 4. Visible, floating, suspended or deposited oil or other products of petroleum origin.
    - 5. Toxic or other deleterious substances to be present in concentrations or quantities which may cause deleterious effects on aquatic biota, wildlife or waterfowl, or which render any of these unfit for human consumption either at levels created in the receiving waters or as a result of biological concentrations.
  - b. Groundwater: The groundwater shall not be degraded as a result of wastewater disposal, compost production, storage of spent compost, or any other operation conducted at this facility.

## B. <u>Specifications</u>

- 1. The evaporation ponds shall be constructed and operated as described in the submittals of January 25, 1985, April 4, 1985, May 16, 1985, and August 9, 1985, except as modified herein, as well as in accordance with all sections of the Subchapter 15 regulations applicable to Class II surface impoundments.
- 2. The evaporation ponds shall be protected from any washout or flooding which could occur as the result of a 1000 year 24 hour precipitation event.
- 3. The leachate collection and removal system shall be maintained and operated to prevent the buildup of hydraulic head on the lower liner. This system shall be inspected quarterly, and any accumulated fluid shall be removed.

- 4. The discharger shall assure that the waste management units, and associated piping, are constructed and maintained to withstand conditions generated during the maximum credible earthquake.
- 5. A minimum freeboard of two feet shall be maintained in the surface impoundments at all times.
- 6. The discharger shall operate the waste management units so as not to cause a statistically significant difference as defined in the Self-Monitoring Program to exist between water quality at the compliance points and the following Water Quality Protection Standards (WOPS):

<u>Parameter</u>	<u>WQPS</u>
Total Dissolved Solids	405.00 mg/l
Nitrate Nitrogen as N	15.00 mg/l

These Water Quality Protection Standards may be reviewed and amended after one year of additional background monitoring data has been obtained in accordance with the Subchapter 15 requirements. The compliance points are identified as wells G-9 through G-12 in the attached self-monitoring program.

#### C. Provisions

- The discharger shall comply with all Prohibitions, Specifications, and Provisions of this Order immediately upon its adoption, except Prohibition A.4.
- 2. The discharger shall comply with Prohibition A.4. by November 1, 1986.
- 3. The discharger shall submit technical reports as required by the attached self-monitoring program, or any revised self-monitoring program issued by the Executive Officer.
- 4. The discharger shall submit a dynamic or pseudo-static analysis which shows that Specification B.4 will be complied with. No wastewater shall be placed in the evaporation ponds until this analysis has been approved by the Executive Officer.
- 5. All reports pursuant to these Provisions shall be prepared under the supervision of a registered engineer or certified engineering geologist.

- 6. The discharger shall submit an evaluation of the need for a third evaporation pond, and a spent compost storage are, prior to September 1, 1988.
- 7. The discharger shall file with this Board a report of any material change or proposed change in the character, location, or quantity of this waste discharge. For the purposes of these requirements, this includes any proposed change in the ownership of the facility.
- 8. The discharger shall maintain a copy of this Order at the site so as to be available at all times to site operating personnel.
- 9. The Board considers the property owner and site operator to have a continuing responsibility for correcting any problems which arise in the future as a result of this waste discharge or related operations.
- 10. The discharger shall permit the Regional Board:
  - a. Entry upon premises on which wastes are located or in which any required records are kept.
  - b. Access to copy any records required to be kept under terms and conditions of this Order.
  - c. Inspection of monitoring equipment or records.
  - d. Sampling of any discharge.
- 11. These requirements do not authorize commission of any act causing injury to the property of another or of the public; do not convey any property rights; do not remove liability under federal, state, or local laws; and do not authorize the discharge of wastes without appropriate permits from other agencies or organizations.
- I, Roger B. James, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on November 20, 1985.

Røgør B. James Executive Officer

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Attachments:

Self-Monitoring Program.

# CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN FRANCISCO BAY REGION

#### TENTATIVE SELF-MONITORING PROGRAM

FOR

MONTEREY MUSHROOMS, INC. MORGAN HILL, SANTA CLARA COUNTY

#### PART A

#### A. GENERAL

Reporting responsibilities of waste dischargers are specified in Sections 13225(a), 13267(b), 13383, and 13387(b) of the California Water Code and this Regional Board's Resolution No. 73-16. This self-monitoring program is issued in accordance with Section C.3. of Regional Board Order No. 85-128.

The principal purposes of a monitoring program by a waste discharger, also referred to as a self-monitoring program, are: (1) to document compliance with waste discharge requirements and prohibitions established by this Regional Board, (2) to facilitate self-policing by the waste discharger in the prevention and abatement of pollution arising from waste discharge, (3) to develop or assist in the development of effluent standards or other limitations, discharge prohibitions, national standards of performance, pretreatment and toxicity standards, and other standards, and (4) to prepare water and wastewater quality inventories.

#### B. SAMPLING AND ANALYTICAL METHODS

Sample collection, storage, and analyses shall be performed according the most recent version of the latest edition of <u>Standard Methods for the Examination of Water and Wastewater</u> prepared and published jointly by the American Public Health Association, American Water Works Association, and Water Pollution Control Federation, or other methods approved by the Executive Officer of this Regional Board.

Water and waste analyses shall be performed by a laboratory approved for these analyses by the State Department of Health. The director of the laboratory whose name appears on the certification shall supervise all analytical work in his laboratory and shall sign all reports of such work submitted to the Regional Board.

All monitoring instruments and equipment shall be properly calibrated and maintained to ensure accuracy of measurements.

#### C. DEFINITION OF TERMS

- A Grab Sample is a discrete water sample collected at any time.
- 2. Receiving Water(s) refers to any water which actually or potentially receives surface or groundwaters which pass over, through, or under waste materials. In this case Fisher Creek and tributary creeks, and the Santa Clara Valley groundwater basin are the receiving waters.
- 3. Standard Observations refer to:
  - a. Total Dissolved Solids in mg/l.
  - b. Kjeldahl Nitrogen as N in mg/l.
  - c. Nitrate Nitrogen as N in mg/l.
  - d. Water elevation in feet above mean sea level.
  - e. Flow in gallons per day.
- D. SCHEDULE OF SAMPLING, ANALYSES, AND OBSERVATIONS

The discharger is required to perform sampling, analyses, and observations according to the schedule specified in Part B no later than September 1, 1986. This sampling shall be conducted in accordance with the requirements of Article 5 of Subchapter 15, Chapter 3, Title 23, CAC. All samples used for compliance purposes shall be split in the field into at least 4 portions, and analyzed for the relevant parameters by identical analytical procedures.

### E. RECORDS TO BE MAINTAINED

Written reports shall be maintained by the discharger, and shall be retained for a minimum of three years. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge or when requested by the Regional Board. Such records shall show the following for <u>each</u> sample:

1. Identity of sample and sample station by number.

- 2. Date and time of sampling.
- 3. Date and time that analyses are started and completed, and name of personnel performing the analyses.
- 4. Complete procedure used, including method of preserving the sample, and the identity and volumes of reagents used. A reference to a specific section of a reference required in Part A, Section B is satisfactory.
- 5. Calculation of results.
- 6. Results of analyses, and detection limits for each analysis.

# F. REPORTS TO BE FILED WITH THE REGIONAL BOARD

Written self-monitoring reports shall be filed for each calendar quarter (unless specified otherwise in Part B) by the 15th day of the following month. In addition an annual report shall be filed as indicated in F.5. The reports shall be comprised of the following:

## 1. Letter of Transmittal

A letter transmitting the essential points in each self-monitoring report should accompany each report. Such a letter shall include a discussion of any requirement violations found during the past quarter and actions taken or planned for correcting violations, such as operation modifications and/or facilities expansion. If the discharger has previously submitted a detailed time schedule for correcting requirement violations, a reference to the correspondence transmitting such schedule will be satisfactory. violations have occurred in the last quarter this shall be stated in the letter of transmittal. Monitoring reports and the the letter transmitting reports shall be signed by a principal executive officer at the level of vice-president or his duly authorized representative if such representative is responsible for the overall operation of the facility from which the discharge originates. The letter shall contain a statement by the official, under penalty of perjury, that to the best of the signer's knowledge the report is true, complete, and correct.

- 2. Each report shall include a compliance evaluation summary sheet. This sheet shall contain:
  - a. Tabular results of all analyses and observations, whether taken at the compliance points or elsewhere. Freeboard for all ponds shall be calculated and reported.
  - The sample mean and sample variance for values of b. those parameters for which Water Quality Protection Standards (WQPS) have been established shall be calculated from analyses of grab sample sets taken at the compliance points defined in Waste Discharge Requirements for this facility. The mean value for each 'compliance parameter' at each compliance point, and the applicable WQPS, shall be compared to determine if the difference between them is statistically significant at the 0.05 level using Cochran's Approximation to the Behrens-Fisher Student's t-test as described in Appendix II of Subchapter 15, Chapter 3, Title 23, CAC. The discharger may propose an alternative statistical procedure to be used in making this determination pursuant to Section 2555 (h) (3) of Subchapter 15. If a statistically significant difference is found this shall be reported as a suspected requirement violation in the letter of transmittal.
  - c. A graphic description of the velocity and direction of groundwater flow under/around the waste management units, based upon the past and present water level elevations and pertinent visual observations.
- 3. A map or aerial photograph shall accompany each report showing observation station locations.
- 4. Laboratory statements of results of analyses specified in Part B must be included in each report. The laboratory director shall sign the laboratory statement of analytical results.
- 5. By January 31 of each year the discharger shall submit an annual report to the Regional Board covering the previous calendar year. The report shall contain:
  - (a) Tabular and graphical summaries of the monitoring data obtained during the previous year.

- (b) A comprehensive discussion of the compliance record, and the corrective actions taken or planned with may be needed to bring the discharge into full compliance with the waste discharge requirements.
- (c) A written discussion of the groundwater analyses indicating any change in the quality of ground water.
- 6. A well drilling log shall be submitted for each sampling well established per this monitoring program, as well as a report of inspection or certification that each well has been constructed in accordance with the construction standards of the Santa Clara Valley Water District. These shall be filed within 30 days after well installation.

#### Part B

- I. DESCRIPTION OF OBSERVATION STATIONS AND SCHEDULE OF OBSERVATIONS.
  - A. Groundwater monitoring

<u>Station</u>	<u>Description</u>	<u>Observations</u>	Frequency
G-8 thru G-12	Located as shown on the map attached	All Standard observations other than e	Once each quarter

B. Percolation Pond influent

<u>Station</u>	Description	<u>Observations</u>	Frequency
P-1	Located at the discharge point into the pond.	All Standard observations other than d	Monthly for a. Daily for e Quarterly for b and c

C. Evaporation pond monitoring

Station	<u>Description</u>	<u>Observations</u>	Frequency
E-1, E-2	Located in the pipeline(s) to the ponds, for flow, and at a convenient location, for elevation	Standard observations d and e	Daily

D. Leachate Collection and Removal System Monitoring

Station	Description	<u>Observations</u>	Frequency
L-1, L-2	Located in the leachate collection piping	Leachate quantity in gallons	Once each quarter

#### II. CONTINGENCY REPORTING

A. A report shall be made in writing to the Regional Board within 7 days if the presence of a contaminant in statistically significant levels greater than a WQPS is found at any of the compliance points. The discharger shall immediately resample all compliance points where the suspected violations have occurred.

- B. If the resampling and analysis confirms the earlier finding of elevated levels of contaminants outside the waste management units, the discharger must submit within 90 days an amended Report of Waste Discharge for establishment of a verification monitoring program meeting the intent of Section 2557 of Subchapter 15, Title 23, CAC.
- C. If the presence of elevated levels of contaminants outside the compliance zones is verified it will be concluded that the discharger is out of compliance with Board Order No. 85-128. In this event the discharger shall submit to the Regional Board within 180 days an amended Report of Waste Discharge requesting authorization to establish a corrective action program meeting the intent of Section 2558 of Subchapter 15.
- I, Roger B. James, Executive Officer, hereby certify that the foregoing Self-Monitoring Program:
- 1. Has been developed in accordance with the procedure set forth in this Regional Board's Resolution No. 73-16 in order to obtain data and document compliance with waste discharge requirements established in Regional Board Order No. 85-128.
- 2. Is effective on the date shown below.

3. May be reviewed or modified at any time subsquent to the effective date, upon written notice from the Executive Officer or request from the discharger.

Røger B./James Executive Officer

Date Ordered

Attachment: SMP Map

